



US009638363B2

(12) **United States Patent**  
**Kury**

(10) **Patent No.:** **US 9,638,363 B2**  
(45) **Date of Patent:** **May 2, 2017**

(54) **HOSE NIPPLE AND CORRESPONDING  
HOSE ARRANGEMENT**

USPC ..... 137/454.2; 285/18, 353, 354; 277/616  
See application file for complete search history.

(75) Inventor: **Werner Kury**, Mullheim (DE)

(56) **References Cited**

(73) Assignee: **Neoperl GmbH**, Müllheim (DE)

U.S. PATENT DOCUMENTS

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 501 days.

469,830	A	3/1892	Cain	
1,906,826	A *	5/1933	Smith	F16L 19/0218 277/612
2,013,293	A *	9/1935	Snell	F16L 23/08 285/33
3,427,053	A	2/1969	Dunlap et al.	
4,072,328	A *	2/1978	Elliott	F16L 19/0218 285/148.28
4,586,735	A	5/1986	Innes	
4,819,908	A	4/1989	Norkey	
5,027,845	A	7/1991	Silagy	
5,131,695	A *	7/1992	Wiser	F16L 19/0218 285/354

(Continued)

(21) Appl. No.: **14/127,302**

(22) PCT Filed: **Apr. 26, 2012**

(86) PCT No.: **PCT/EP2012/001788**

§ 371 (c)(1),

(2), (4) Date: **Dec. 18, 2013**

(87) PCT Pub. No.: **WO2012/175154**

PCT Pub. Date: **Dec. 27, 2012**

(65) **Prior Publication Data**

US 2014/0116552 A1 May 1, 2014

(30) **Foreign Application Priority Data**

Jun. 24, 2011 (DE) ..... 20 2011 104 370 U

(51) **Int. Cl.**  
**F16L 19/02** (2006.01)  
**F16L 19/025** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **F16L 19/0212** (2013.01); **F16L 19/025**  
(2013.01); **F16L 19/0218** (2013.01); **Y10T**  
**137/9029** (2015.04)

(58) **Field of Classification Search**  
CPC . F16L 19/025; F16L 19/0218; F16L 19/0212;  
Y10T 137/9029

FOREIGN PATENT DOCUMENTS

DE	19705857	8/1998
GB	2230070	10/1990
NL	2685271	3/1964

*Primary Examiner* — Kevin Lee

*Assistant Examiner* — P. Macade Nichols

(74) *Attorney, Agent, or Firm* — Volpe and Koenig, P.C.

(57) **ABSTRACT**

A hose connection piece (2), on which a sleeve-shaped insertion part (15) is arranged in the region of the outlet (14) of the passage channel (13) formed by a hose nipple (5) of the hose connection piece (2) and which is to be fastened on the nipple base body (12) of the hose nipple (5) by a snap-action or latching connection (16). The insertion part (15) can carry a sealing ring (7) for the contact flange (6) of the hose nipple (5) and/or axially secure a backflow preventer cartridge (26) which is introduced into the receiving space (25) of the hose nipple (5).

**19 Claims, 5 Drawing Sheets**

